

Amendments to the Abstract:

Please replace the Abstract with the following revised abstract:

A multiplexer (MUX) driver system controls a deformable mirror, in part, by enabling and disabling individual or multiple actuators, mechanically coupled to the deformable mirror, through use of switches (e.g., solid-state switches) electrically coupled between the actuators and a reference node. In operation, the driver system enables actuator(s) by closing respective switch(es) and driving the enabled actuator(s) to deform respective portions of the deformable mirror in a controlled manner. The driver system disables the actuator(s) by opening the respective switch(es) to decouple the actuator(s) from the reference node. The switches, in the open state, prevent respective actuators from discharging, thereby allowing a desired surface figure of the deformable mirror to be maintained for long periods of time without having to refresh the actuators. The multiplexer driver system supports low-power modes of operation and is well suited for driving a deformable mirror in larger systems, such as space-based telescopes.